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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,948	03/31/2004	Masao Tanabe	50335-050	4930
7590 03/08/2006				
McDERMOTT, WILL & EMERY				
600 13th Street, N. W.				
Washington, DC 20005-3096				
			EXAMINER	
			BOATENG, ALEXIS ASIEDUA	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/812,948	<b>Applicant(s)</b> TANABE ET AL.	
	<b>Examiner</b> Alexis Boateng	<b>Art Unit</b> 2838	

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/26/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. The claims are objected to because they include reference characters, which are not enclosed within parentheses.

Reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Crisp (U.S. 6,456,035).

**Regarding claim 1,** Crisp discloses an AC adapter power supply apparatus comprising:

a line supplying a DC voltage converted by and AC-DC conversion circuit to a DC output circuit (figure 2 items 26 (ac-dc conversion circuit) and item DC output battery interface);

a battery switch (figure 2 item 34) circuit for supplying the DC voltage converted by the AC-DC conversion circuit to a battery via a charging circuit (figure 2 item 18) and controlling contact and separation of the battery and a DC-DC conversion circuit (figure 6 items 105' and 110') from the battery, and a line for supplying to the DC output circuit via the DC-DC conversion circuit for increasing and decreasing the voltage (figure 6 items 105' and 110'), wherein a DC output detection circuit is connected to an output side of the AC-DC conversion circuit (figure 2 items 26 and item DC output battery interface), and the output side of the DC output detection circuit is connected to an apparatus status output circuit for outputting a status monitoring signal to the outside and to the battery switch circuit (column 4 line 26 – 38), and then an output voltage changeover switch for switching a set-up output voltage is connected to the AC-DC conversion circuit and the DC-DC conversion circuit (figure 2 item 70).

**Regarding claim 2,** Crisp discloses wherein the battery is connected to a battery voltage detection circuit for detecting voltage of the battery (figure 2 item 58), and the output side of the battery voltage detection circuit is connected to the apparatus status output circuit (figure 2 item U1) for outputting the status monitoring signal to the outside (figure 2 item 18; item 58 is located within item 18 wherein the microcontroller outputs the status signal) and

the battery switch circuit for controlling the contact and separation of the battery and the DC-DC conversion circuit (figure 2 item 34; column 4 lines 8 – 25).

**Regarding claim 3**, Crisp discloses wherein the charging circuit (figure 2 item 18) is connected to a charging on-off switch (figure 2 item 34; column 4 lines 8 – 26; column 9 lines 1 - 29) for outputting a signal which connects the AC-DC conversion circuit (figure 2 item 26) to the battery when the battery is a secondary battery and separates the the AC-DC conversion circuit from the battery when the battery is a primary battery (figure 2 item 26 (bridge rectifier), is separated from item 14 (battery), by item 18 (charge circuit); claim 31 discloses wherein the system distinguishes between primary and secondary batteries).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Crisp (U.S. 6,456,035) in view of Mattsson (U.S. 5,233,284).

**Regarding claim 4**, Crisp discloses the battery switch (figure 2 item 34), but does not disclose the remainder of the invention as claimed. Mattsson discloses in figure 4 item S1, wherein a switch for connecting the battery to the DC-DC conversion circuit (figure 4 item DC/DC converter) to the battery when the AC

input is missing. At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify the Crisp system with the Mattson system so that system can be manually turned on and off when an AC power source is unavailable.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

  
**KARL EASTHOM**  
**SUPERVISORY PATENT EXAMINER**